Claims

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- 1. Method of assessing the state of Alzheimer's disease in a subject comprising detection of at least one polypeptide comprised in a group of polypeptides having, respectively, molecular masses of 4824 ± 20 Da, of 7691 ± 20 Da, of 11787 ± 20 Da, of 11988 ± 20 Da, of 13416 ± 20 Da, of 4769 ± 20 Da, of 6958 ± 20 Da, of 6991 ± 20 Da, of 13412 ± 20 Da, of 13787 ± 20 Da, of 17276 ± 20 Da, of 40437 ± 20 Da, of 6895 ± 20 Da, of 6928 ± 20 Da, of 7691 ± 20 Da, of 7769 ± 20 Da, of 7934 ± 20 Da, of 5082 ± 20 Da, of 6267 ± 20 Da, of 6518 ± 20 Da, of 7274 ± 20 Da, and of 8209 ± 20 Da.
 - 2. Method of claim 1 in which at least 2, or 3, or 4, or 5, or 10 or all polypeptides of said group of peptides are detected.
- Method of assessing the state of Alzheimer's disease in a subject comprising detection of at least one polypeptide comprising the sequence of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16 and/or SEQ ID NO:17.
 - 4. Method of assessing the state of Alzheimer's disease in a subject comprising detection of at least one polypeptide comprised in a group of polypeptides consisting of

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- i) human cystatin C,
- ii) human beta-2-microglobulin,
- iii) human myoglobin (new variant)
- iv) neurosecretory protein VGF,
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- v) a fragment of at least 5 amino acids of human cystatin C,
- vi) a fragment of at least 5 amino acids of human beta-2-microglobulin,

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- vii) a fragment of at least 5 amino acids of human myoglobin (new variant), and
- viii) a fragment of at least 5 amino acids of neurosecretory protein VGF.
- 5 Method of investigating the progression of Alzheimer's disease in a subject characterised in that a method of any of claims 1 to 4 is performed with at least two distinct samples drawn from the same subject.
- 6. Method of any of claims 1 to 5, wherein detection of said polypeptide(s) is by SELDI-TOF MS.
 - 7. Method of any of claims 1 to 5, wherein specific antibodies or antibodies recognising said polypeptides are used for detection of said polypeptide(s).
- Method of any of claims 1 to 7, wherein detection is in a sample comprising CSF, blood, serum, plasma, urine, seminal plasma, nipple fluid, and/or cell extracts of said patient.
- 9. A kit comprising polypeptides having a molecular mass of 4824 ± 20 Da, of 7691 ± 20 Da, of 11787 ± 20 Da, of 11988 ± 20 Da, of 13416 ± 20 Da, of 4769 ± 20 Da, of 6958 ± 20 Da, of 6991 ± 20 Da, of 13412 ± 20 Da, of 13787 ± 20 Da, of 17276 ± 20 Da, of 40437 ± 20 Da, of 6895 ± 20 Da, of 6928 ± 20 Da, of 7691 ± 20 Da, of 7769 ± 20 Da, of 7934 ± 20 Da, of 5082 ± 20 Da, of 6267 ± 20 Da, of 6518 ± 20 Da, of 7274 ± 20 Da, and/or of 8209 ± 20 Da.

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10. A kit comprising a fragment of at least 5 amino acids of human cystatin C, a fragment of at least 5 amino acids of human beta-2-microglobulin, a fragment of at least 5 amino acids of human myoglobin (new variant), and a fragment of at least 5 amino acids of neurosecretory protein VGF.